

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT7077985

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
FRANZ-JOSEF WÖSTMANN	07/07/2021
LUKAS STUMM	07/07/2021
CHRISTIAN SOLTMANN	07/07/2021
MATTHIAS BUSSE	07/07/2021
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	FRAUNHOFER-GESELLSCHAFT ZUR FÖRDERUNG DER ANGEWANDTEN FORSCHUNG E.V.
<b>Street Address:</b>	HANSASTRASSE 27C
<b>City:</b>	MÜNCHEN, 80686
<b>State/Country:</b>	GERMANY
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	17250870
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
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<b>ATTORNEY DOCKET NUMBER:</b>	3037.221US1
<b>NAME OF SUBMITTER:</b>	KIMBERLIE PATES
<b>SIGNATURE:</b>	/Kimberlie Pates/
<b>DATE SIGNED:</b>	12/16/2021
<b>Total Attachments: 7</b>	
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RECORDATION FORM COVER SHEET  
PATENTS ONLY

Atty Ref/Docket No.: 3037.221US1

Patent and Trademark Office

To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Franz-Josef WÖSTMANN, Lukas STUMM, Christian  
SOLTMANN, Matthias Busse

Additional name(s) of conveying party(ies) attached?

Yes  No

3. Nature of conveyance:

Assignment  Merger  
 Security Agreement  Change of Name  
 Other

Execution Date: July 7, 2021, July 7, 2021, July 7, 2021,  
July 7, 2021

2. Name and address of receiving party(ies):

Name: Fraunhofer-Gesellschaft zur Förderung der  
angewandten Forschung e.V.

Street Address: HansasträÙe 27c

City: München, 80686

Country: Germany

Additional name(s) & address(es) attached?  Yes  
 No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

Serial No. 17/250,870

B. Patent No.(s)

Additional numbers attached?  Yes  No

5. Name and address of party to whom correspondence  
concerning document should be mailed:

Name: Jerome M. Sundin

Address:

Schwegman Lundberg & Woessner, P.A.  
P.O. Box 2938  
Minneapolis, Minnesota 55402

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$ 0.00

Enclosed

Authorized to be charged to deposit account  
19-0743

8. Please charge any additional fees or credit any over  
payments to our Deposit Account No.: 19-0743

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9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy  
of the original document.

Jerome M. Sundin/Reg. No. 78,632

Name of Person Signing

/ Jerome M. Sundin /

Signature

12/14/2021

Date

Total number of pages including cover sheet: 7

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks  
Mail Stop Assignment Recordation Services  
P.O. Box 1450  
Alexandria, VA 22313-1450

**PATENT**  
**REEL: 058409 FRAME: 0493**

ASSIGNMENT

WHEREAS, Franz-Josef WÖSTMANN, Lukas STUMM, Christian SOLTSMANN and Matthias BUSSE (hereinafter the "Undersigned") have made one or more inventions and other subject matter (hereinafter collectively referred to as the "Invention"); as described in the patent application filed on March 16, 2021, assigned US application serial number 17/250,870, and titled CASTING CORE FOR CASTING MouldS AND METHOD FOR THE PRODUCTION OF SAME as described in a patent application filed on September 19, 2019 assigned PCT application serial number PCT/EP2019/075154; and as described in a patent application filed on September 19, 2018 assigned German application serial number 10 2018 215 962.9.

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency, and adequacy of which are hereby acknowledged by the Undersigned, the Undersigned do hereby Irrevocably and unconditionally:

CONVEY, ASSIGN, AND TRANSFER to Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V. (the "Assignee"), having a place of business at Hansastraße 27c, München 80686, Germany, the Undersigned's entire right, title, and interest for the United States and all foreign countries and jurisdictions in and to:

the invention which is disclosed in the above-identified application or applications;  
such application or applications, and all divisional, continuing (including continuation-in-part), substitute, renewal, reissue, and all other applications for a patent or patents which have been or shall be filed in the United States (including all provisional and non-provisional applications), and in all foreign countries and jurisdictions based in whole or in part on any of such invention (including any application for a utility model or an innovation patent application);

all original and reissued patents which have been or shall be issued in the United States and all foreign countries and jurisdictions based in whole or in part on any of such invention;

including the right to claim priority to the above-identified patent application or applications in relation to subject matter based in whole or in part on the above-identified patent application or applications and any of the foregoing including the right to file foreign applications under the provisions of any convention or treaty;

and including the right to all causes of action, remedies, and other enforcement rights related to the above-identified application or applications, including without limitation the right to sue for past, present, or future infringement, misappropriation, or violation of any and all rights related to the above-identified patent application or applications and any of the foregoing, including the right to obtain and collect damages for past, present, or future infringement;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such invention to the Assignee;

AUTHORIZE AND REQUEST that any attorney associated with U.S. Patent and Trademark Office (USPTO) Customer No. 21186 may (directly or through his/her designee) delete, insert, or alter any

Assignment

Assignors: Franz-Josef WÖSTMANN et al.

Title: CASTING CORE FOR CASTING MOULDS AND METHOD FOR THE PRODUCTION OF SAME

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Docket No: 3037.221US1  
Client Ref. No. 207P 3960 GOWG

information related to the above-identified patent application or applications or any of the foregoing, after execution of this Assignment;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or shall be made to others by the Undersigned, and that the full right to convey the same as herein expressed is possessed by the Undersigned;

COVENANT, that when requested and without compensation, but at the expense of the Assignee, in order to carry out in good faith the intent and purpose of this Assignment, the Undersigned shall (1) execute all provisional, non-provisional, divisional, continuing (including continuation-in-part), substitute, renewal, reissue, and all other patent applications for the invention; (2) execute all rightful oaths, declarations, assignments, powers of attorney and other papers for the invention; (3) communicate to the Assignee all facts known to the Undersigned relating to the invention and the history thereof; (4) cooperate with the Assignee in any interference, reexamination, reissue, opposition, dispute, or litigation involving any of the applications or patents for the invention; and (5) take such further actions as the Assignee shall reasonably consider necessary or desirable for vesting title to such invention in the Assignee, or for securing, maintaining and enforcing proper patent protection for the invention;

COVENANT, that should any provision of this agreement be held unenforceable by an authority of competent jurisdiction, such a ruling shall not affect the validity and enforceability of the remaining provisions.

THIS AGREEMENT IS TO BE BINDING on the heirs, assigns, representatives, and successors of the Undersigned, and is to extend to the benefit of the successors, assigns, and nominees of the Assignee.

AGREED as of the date of my signature below:

Assignment

Assignor: Franz-Josef WÖSTMANN et al.

Title: CASTING CORE FOR CASTING MOULDS AND METHOD FOR THE PRODUCTION OF SAME

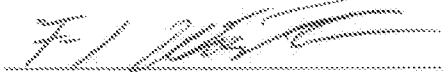
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Docket No: 3037 22HUS1

Client Ref. No. 207P 3960 GO/CG

Assignor:

(Signature):



Name: Franz-Josef WÖSTMANN

City/State or Country: Bremen, Germany

Date:

07.07.2021

Assignment

Assignors: Franz-Josef WÖSTMANN et al.

Title: CASTING CORE FOR CASTING MOULDS AND METHOD FOR THE PRODUCTION OF SAME

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Docket No: 3037.221US1  
Client Ref. No. 207P 3060 GC/CG

Assignor:

(Signature):



Name: Lukas STUMM

City/State or Country: Bremen, Germany

Date:

07.07. 2021

Assignment

Assignors: *Franz-Josef WÖSTMANN et al.*

Docket No: 3037.221US1

Client Ref. No. 207P 3960 GDCG

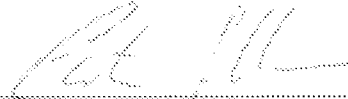
Title: CASTING CORE FOR CASTING MOULDS AND METHOD FOR THE PRODUCTION OF SAME

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Assignor:

(Signature):



Name: Christian SOLTSMANN

City/State or Country: Bremen, Germany

Date:

01.07.2021



Assignment:

Assignors: Franz-Josef WÖSTMANN et al.

Title: CASTING CORE FOR CASTING MOULDS AND METHOD FOR THE PRODUCTION OF SAME

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Docket No. 3037.224US1

Client Ref. No. 2079 3960 G/C/C/G

Assignor:

(Signature):



Name: Matthias BUSSE

City/State or Country: Bremen, Germany

Date:

07.07.2021